APPENDIX VIII

TABLE ^—

Continued

COMBUSTION OF BLAST FURNACE GAS—COMPUTATION SHEET 3

Computation for curves showing the effects of preheat upon calorific intensity. Values from Sheets 1 and 2.

Temperature of Preheat	0°	200°	400°	600°	800°
Calories released by gas at 0°	1861				
Added to gas by preheat		144	296	456	622
Preheated gas *(A* -i- I5) S		2005	2157	2317	2483
Added by air preheat 100% . (C)		94	191	292	394
Preheated air *(A-|-C)*		1955	2052	2153	2257
Preheat gas and air (D-h-S) .		2099	2348	2609	2879
Added by air preheat 120% .		113	229	350	473
Preheated air *(A-+E]*		1974	2090	2211	2334
Preheated gas and air (.F-	----	2118	2384	2667	2956
Added by air preheat 140 % .		132	267	409	552
Preheated air *(A+G)*		1993	2128	2270	2413
Preheated air and gas f/7-f j?)		2137	.242	2726	3035
Added by air preheat 180% .		170	344	526	710
Preheated air *(A+K)*		2031	2205	2387	2571
Preheated air and gas (L-f *B)* 2		2175	2501	2843	3193

The values marked S, D, *F, H, L* are spotted upon the heat capacity curves for their corresponding air supplies, and curves are drawn through these points which enable certain approximations to be made in. regard to other air supplies and temperatures of preheat.